

Guidelines for Reviewing Science and Technology Program Research Proposals

These guidelines provide information on the new peer review procedures for evaluating and selecting proposals under the Science and Technology (S&T) Program. The review procedures are intended to efficiently and effectively ensure that: 1) proposals for research are given full and fair review, 2) the program funds research that is in tune with the current and future needs of our water and facility managers, 3) high quality research continues to be conducted, 4) research supports the S&T program goals and performance measures, and 5) meaningful feedback can be provided regarding unsuccessful proposals.

Review Procedure: Different Levels of Review for Scoping, New, and On-going Research

Once all proposals are submitted and assigned a number by the S&T Program, they will be sorted into on-going research, new research and scoping proposals. (On-going research is that which was funded in the prior year and had submitted a multi-year research plan and which is continuing exploration of the same research hypothesis.) All proposals will first undergo a Mission Relevancy review to ensure research is considered relevant and high priority by research end-users. On-going proposals with a high rating for Mission Relevancy will undergo a performance review to ensure progress and productivity in the prior year was satisfactory. New and scoping proposals will undergo a three-phased sequential review: Mission Relevancy first, Technical Merit second, and last affordability and the potential to contribute to program goals, performance measures, steering team priorities, and administration priorities.

Mission Relevancy Review Ratings and Rankings

Mission Relevancy Reviews will be performed by subject matter experts from Regional Offices, Area Offices, and the Commissioner's Office. Reviewers will have all the proposals associated with a single output area; in some cases, one or more output areas may be combined for review purposes. Reviewers will use the relevancy review score card to guide their review, develop their score, document their rationale, and record other comments or suggestions. Reviewers may contact the Principal Investigator if they desire clarification or wish to discuss the proposal further. All reviewers for an output area will be asked to discuss the proposals as a group. Based on that discussion, scores can be altered to reflect new understanding. The output area review group will be asked to submit a single ranking (highest priority listed first). Each individual reviewer will also submit their final rating sheet to the S&T Program. We recognize that this may be difficult since reviewers will be in different offices across Reclamation. Our goal is to have the review operating as an online system, which could simplify this request. Work is underway, and the system should be available when the proposals are due on June 10. The relevancy reviews will be due July 30.

Technical Merit Review Ratings and Rankings

The proposals that rank the highest for Relevancy will then be distributed for Technical Merit Review. As described in the call for proposals memorandum, the technical merit reviewers will be identified in advance by the TSC. Reviews will again be organized around output areas and, where appropriate, similar areas combined. Technical Merit peer reviewers will involve one TSC technical expert, and two experts from outside the TSC (e.g., a Reclamation field, area, or regional office, another agency, or research institution.)

As in the prior step, reviewers will be asked to review all of the proposals provided to them using the Technical Merit score card. Reviewers will work individually, develop their score, document their rationale, and record other comments or suggestions. Reviewers may contact the Principal Investigator if they desire clarification or wish to discuss the proposal further. Then, it is highly desirable that the technical reviews for each output area (or other grouping) discuss the proposals as a group and provide a single ranking (highest quality listed first); however, we recognize this may be difficult due to the use of external reviewers. Based on that discussion, scores can be altered to reflect new understanding. Each individual reviewer will submit their final rating sheet to the S&T Program. We are in the process of developing this as an online system. This input will be due August 30, 2003.

Performance Review

Then the Performance Review will be conducted on the final suite of proposals (i.e., those with high Technical Merit and high Mission Relevancy scores). Performance Review will be conducted by the S&T Program Coordinator, and the S&T Regional Coordinators. Each proposal will be given a “red”, “yellow”, or “green” rating indicating the degree of satisfactory progress and likely contribution to S&T Program performance measures and goals. Receipt of a red rating could jeopardize continued funding, result in reduced funding, and will, at a minimum, trigger management intervention. Yellow ratings indicate that performance that more real time monitoring by the S&T Program may be necessary. Green indicates satisfactory past performance and high contribution to program mission. This review will use completed technical and mission reviewers evaluation sheets, consider the finalists’ “past performance” and potential contribution to S&T program mission and performance measures. This group will then make recommendations to the Director of Research who will consider S&T steering team priorities, administration priorities and initiatives, Congressional direction, and anticipated funding levels. Decisions will be communicated to all Principal Investigators.

Feedback from Reviewers

All reviewers’ forms will be available to the Principal Investigator upon request. Names of reviewers will be “blacked-out” on the forms. Requests should be made to Siegie Potthoff (303-445-2316).

Ombudsman

If after evaluation sheets are reviewed, the Principal Investigator feels that the decision not to fund the project is inappropriate or if significant new information exists (e.g. the addition of significant leveraging), the Principal Investigator may take their case to an ombudsman. Bill Karsell is the ombudsman for TSC originated proposals. The S&T Program regional coordinators are the ombudsmen for proposals originating within their region. After evaluating the situation, the ombudsman will choose whether to take up the case with the Director of Research.

Key Evaluation Factors -- Contribution to S&T Mission Goals and Performance Measures

Principal Investigators as well as reviewers should keep in mind when preparing or reviewing the proposal, the mission of the Bureau of Reclamation, the mission of the S&T program, the S&T Program's performance measures, and the 5-year goals for the appropriate output area(s). The goal of Reclamation's S&T Program is to facilitate the development and use of new scientific and technical solutions that contribute significantly to a safe, affordable, sustainable, and ample water and power supply.

The S&T Program is in the process of establishing performance measures that work at the program level all the way down to each individual research project. One measure reflects the collaboration or partnering in the research effort as reflected in the amount of dollars (or their equivalent in in-kind resources) brought to a research project. It is a surrogate measure of the value others place in the outputs and outcomes from the research. Only actual contributing partners from either or both in-house sources (e.g., Reclamation projects or program offices) or external sources (e.g., other agencies, research institutions or other funding sources) will be counted. A second measure being explored will reflect the Program's (and each of its component research project) facilitation of the use of new science or technology.

In addition the S&T Program is working with the TSC to develop metrics by which to assess progress toward the broad purpose of each of the S&T Program focus areas of 1) increasing the reliability of water deliveries, 2) increasing the reliability of Reclamation's infrastructure, 3) enhancing water supplies, and 4) assisting planning and operational decision making. As these are developed they will be posted on the S&T web site (<http://www.usbr.gov/research>).

If you have questions about the process, please contact Shannon Cunniff, the Director of Research at 202-513-0682, or Chuck Hennig, S&T Program Coordinator at 303-445-2134.